

City of San Jose

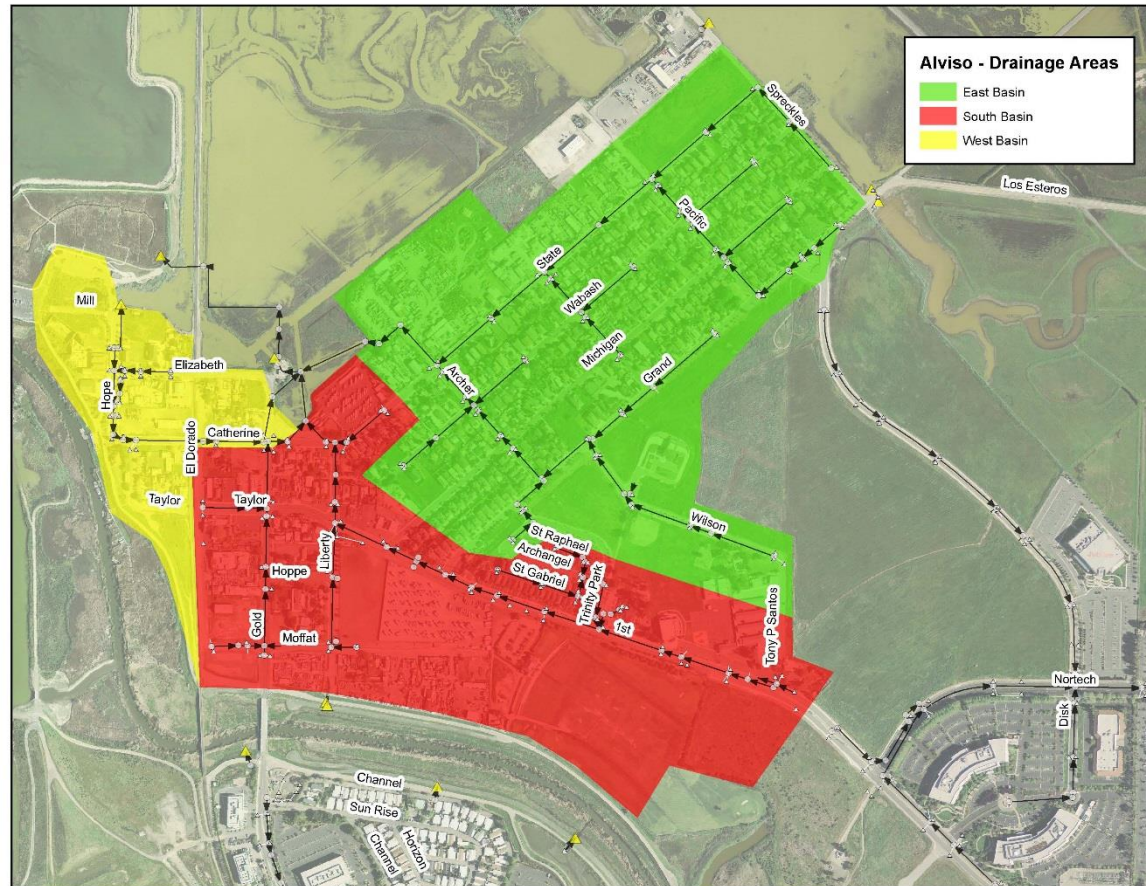
Storm Preparedness in Alviso

City of San José
January 25, 2016

Alviso Location Map



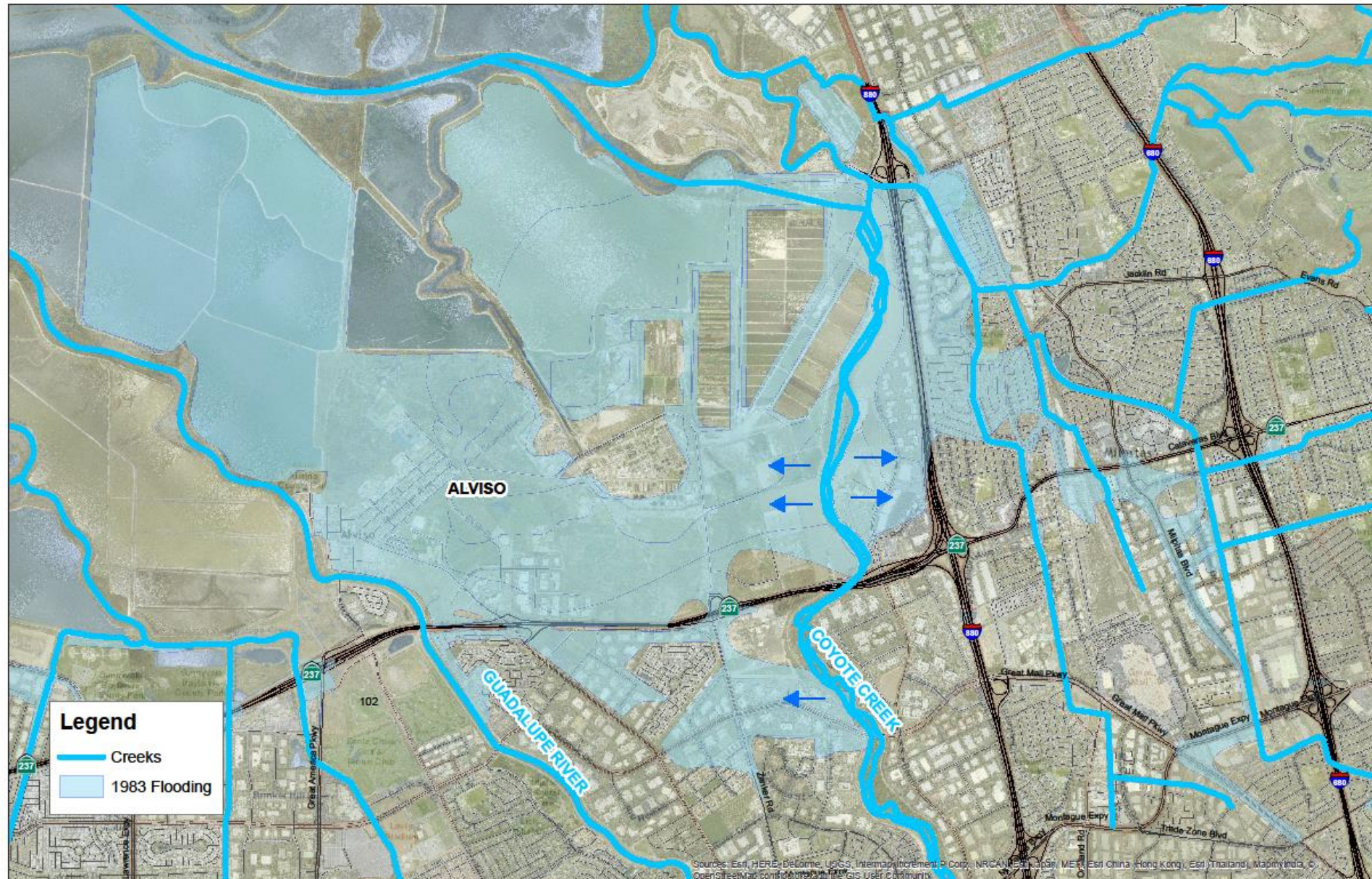
Alviso Storm Drainage areas



Flooding of March 1983

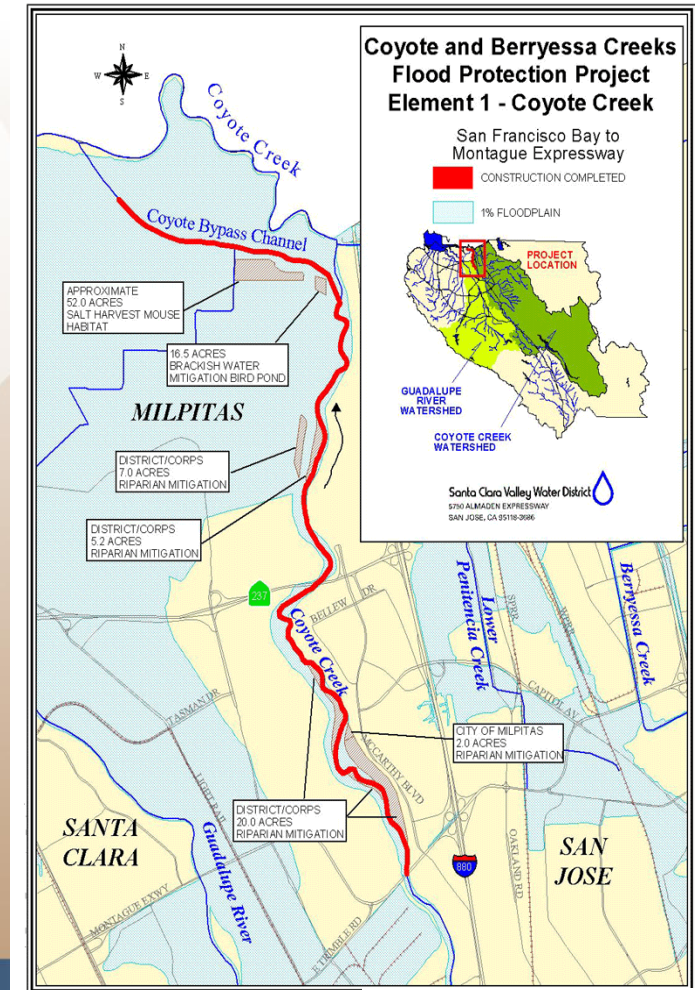
- Saturated Coyote Creek watershed
- Rainfall around 6 inches from Feb. 28 to March 4, 1983
- Anderson uncontrolled spillway release @ 5,000 cfs
- Inadequate channel capacity
- Overflow Coyote Creek u/s and d/s of Highway 237
- No flooding from Lower Guadalupe River

Flooding Map of March 1983



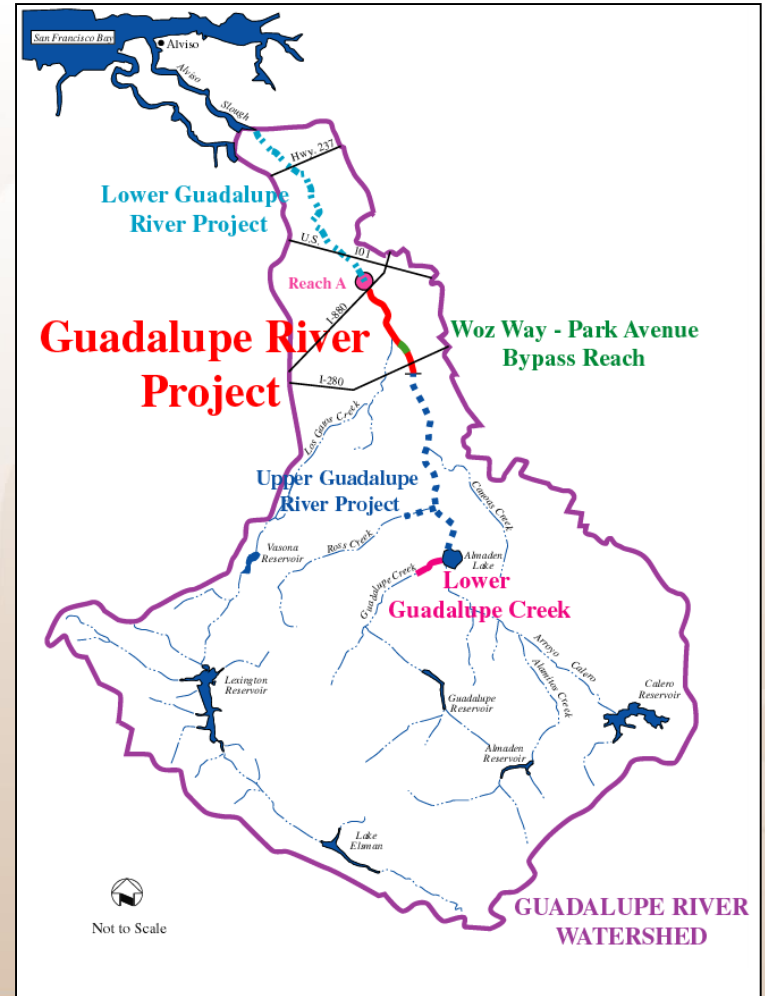
Lower Coyote Flood Protection Project

- Lower Coyote
 - Bay to Montague Expressway
 - Raised levees, floodwalls
 - Bypass Channel near Dixon Landing
 - 1995: 100-year flood protection
 - FEMA design Flow: 12,500 cfs
- 1997 January Storm:
 - over 7,000 cfs
 - No flooding at lower Coyote creek



Lower and Downtown Guadalupe Flood Protection Projects

- **Lower Guadalupe**
 - UPRR to Interstate 880
 - 6.5 miles
 - Raised levees, floodwalls
 - 2004: 100-year flood protection
 - Design Flow: 18,350 cfs
- **Downtown Guadalupe**
 - Interstate 880 to Interstate 280
 - 2.6 miles
 - Bypass systems
 - 2004: 100-year flood protection



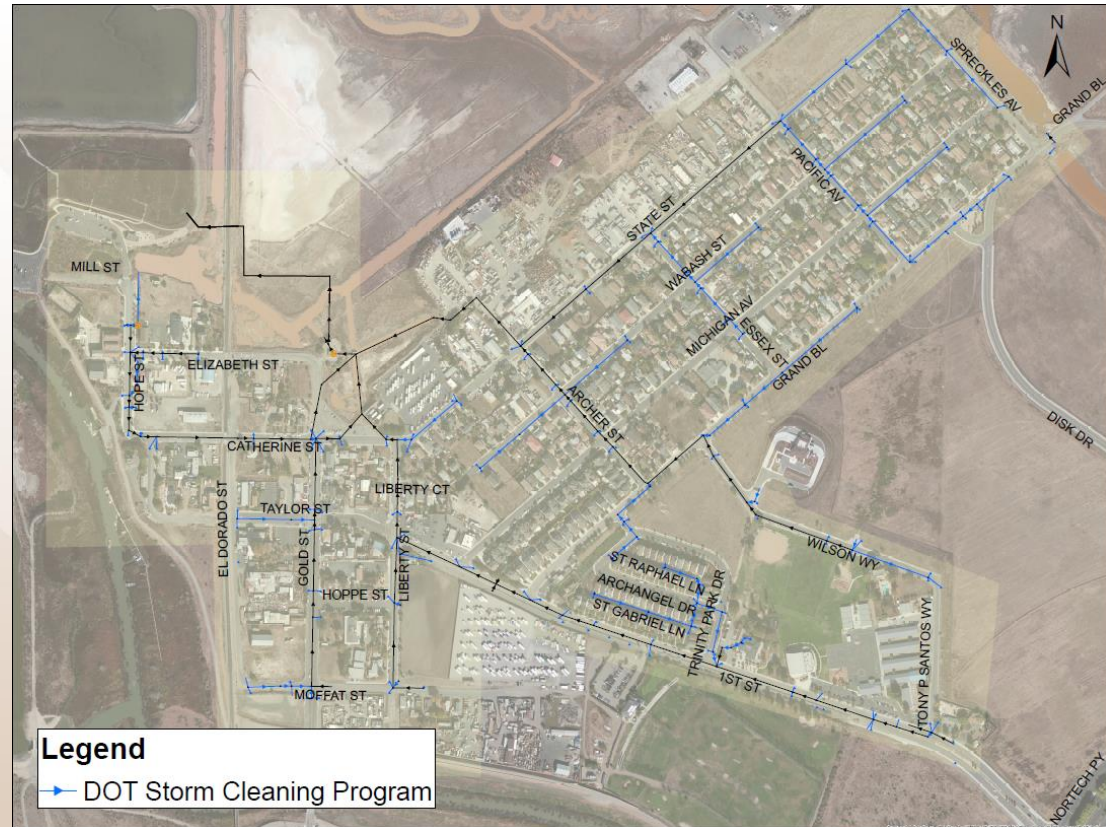
24-hr Storm Event Precipitation and Chance Occurring

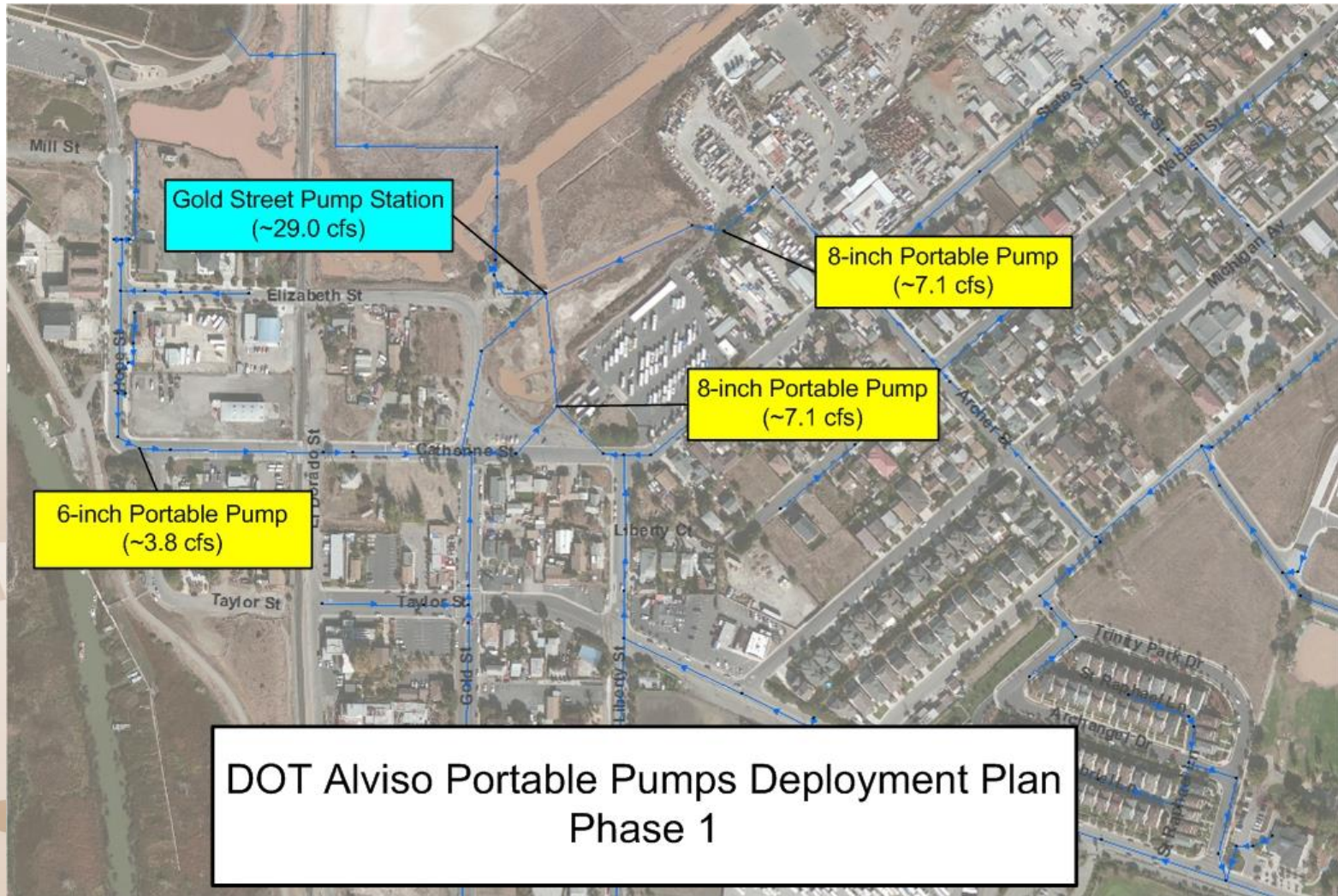
Storm Event Return Period	24-hr Duration Precipitation (inch)	% Chance Occurring in any Particular Year
3-yr	1.80	33%
10-yr	2.84	10%
25-yr	3.41	4%

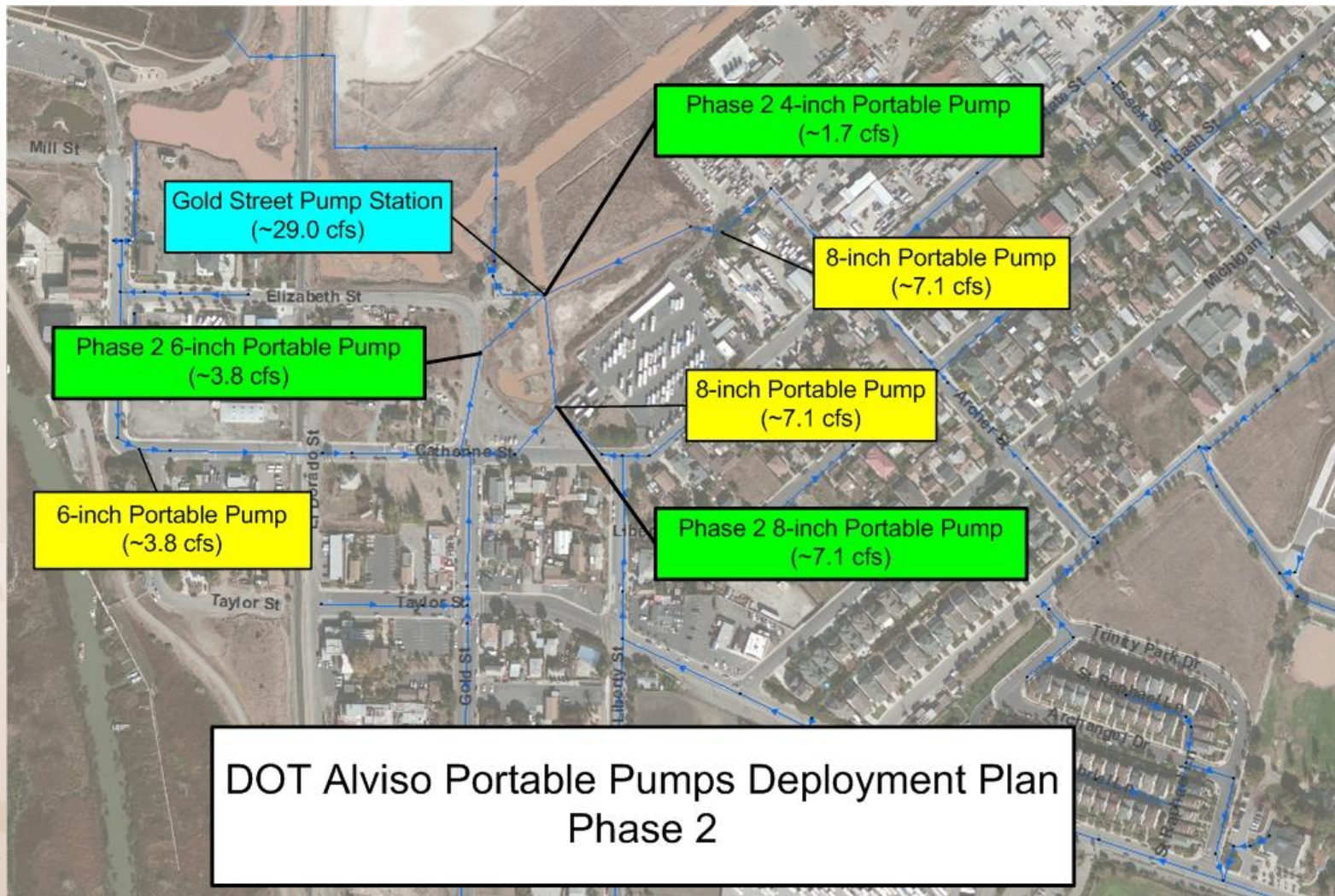
- **December 11, 2014 storm event was 3.6 inches as measured by City's rain guage at the Airport.**
- **Current rainfall totals are 15% ahead of average rainfall through January 18, 2016.**

DOT Storm Preparations

- Storm Drain (24" and under) Cleaning Program completed
- Phase 1 and 2 of Alviso Catch Basins Cleaning Program completed
- 24-hour monitoring at Gold Street Pump Station during storm events
- Portable pump plans in place since November
- Multiple pumps set-up drills completed







City of San Jose

Existing Gold Street Pump Station

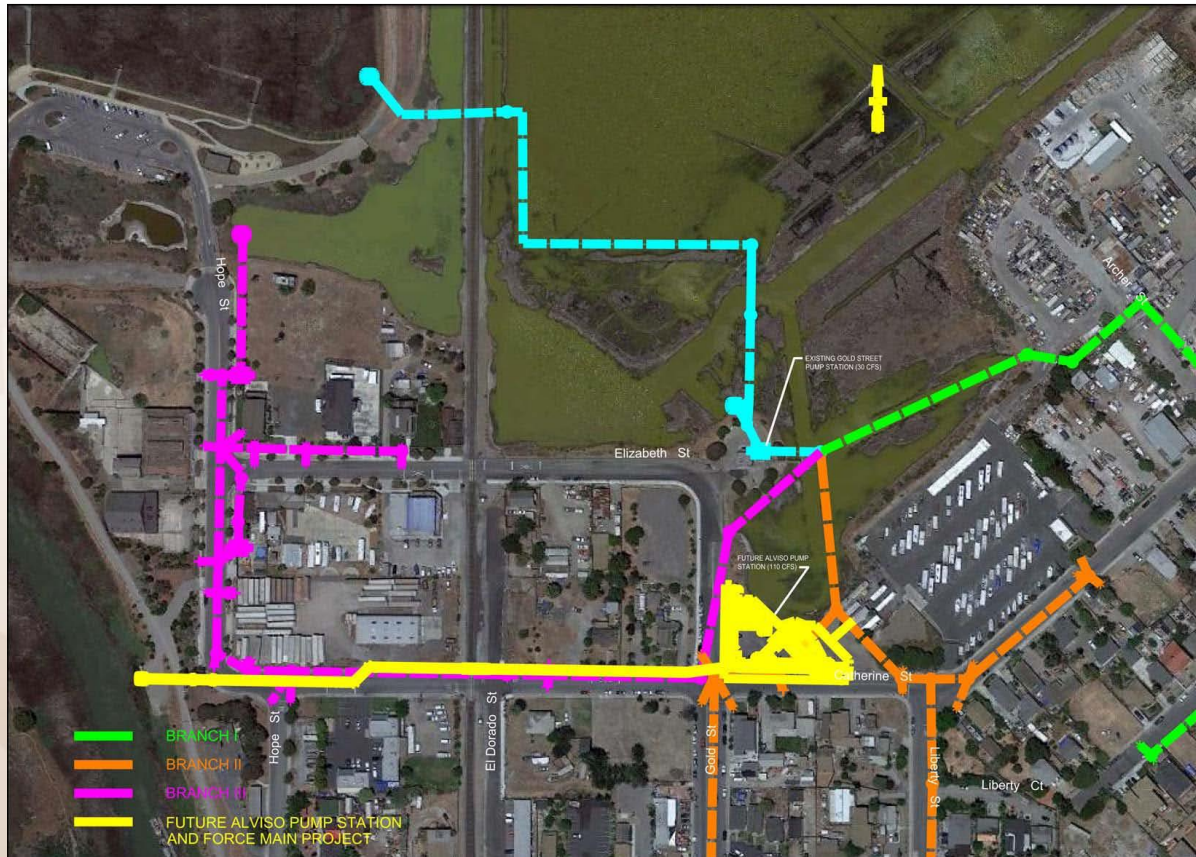
- Constructed in 1970's
- Modified and upgraded over the years
- Serves all 3 Alviso “basins”
- 4 pumps; generator back-up power
- Outfalls (through New Chicago Marsh) into the old Marina
- 30 cubic feet per second (cfs) capacity
- Hydraulic connection to New Chicago Marsh
- Small footprint limits capacity increases

Pump Station Alternatives

1. Modification of Gold Street P.S.
2. Reconstruct a larger Gold Street P.S.
3. New Pump Station (110 cfs)**
4. New Pump Station w cross connect to Gold Street
(110 cfs) (30 cfs)

**The peak 100-year runoff from the Alviso watershed is estimated to be 110 cubic feet per second

Proposed Alviso Pump Station



New Pump Station Site

- City owned property
- Close to existing Gold Street P.S.
- Straight force main outfall alignment/City right of way
- Limits impact to New Chicago Marsh
- Hydraulic connection with Gold Street P. S.
- Gold Street P.S. remains on-line during construction
- Urban design elements; public art elements

Project Schedule

Tasks	Original Schedule	Current Schedule
Alternative Evaluation – Gold Street Pump Station Modifications	August 2013	N/A
Design Start with AN West/MTH joint venture	April 2, 2014	N/A
Final location of Alviso Pump Station	September 19, 2014	N/A
Interagency Meeting with Regulatory Agencies	N/A	October 14, 2015
30-day Circulation of Initial Study	January 2015	January 2016
Design Complete	May 2015	May 26, 2016
Regulatory Permit Approval – Army Corps, RWQCB, USFWS, CDFW, BCDC, UPRR, SCVWD	March 2015	March 2017
Award Contract	August 14, 2015	April 11, 2017
Construction	October 2, 2015	June 12, 2017
Beneficial Use	October 7, 2016	June 12, 2018